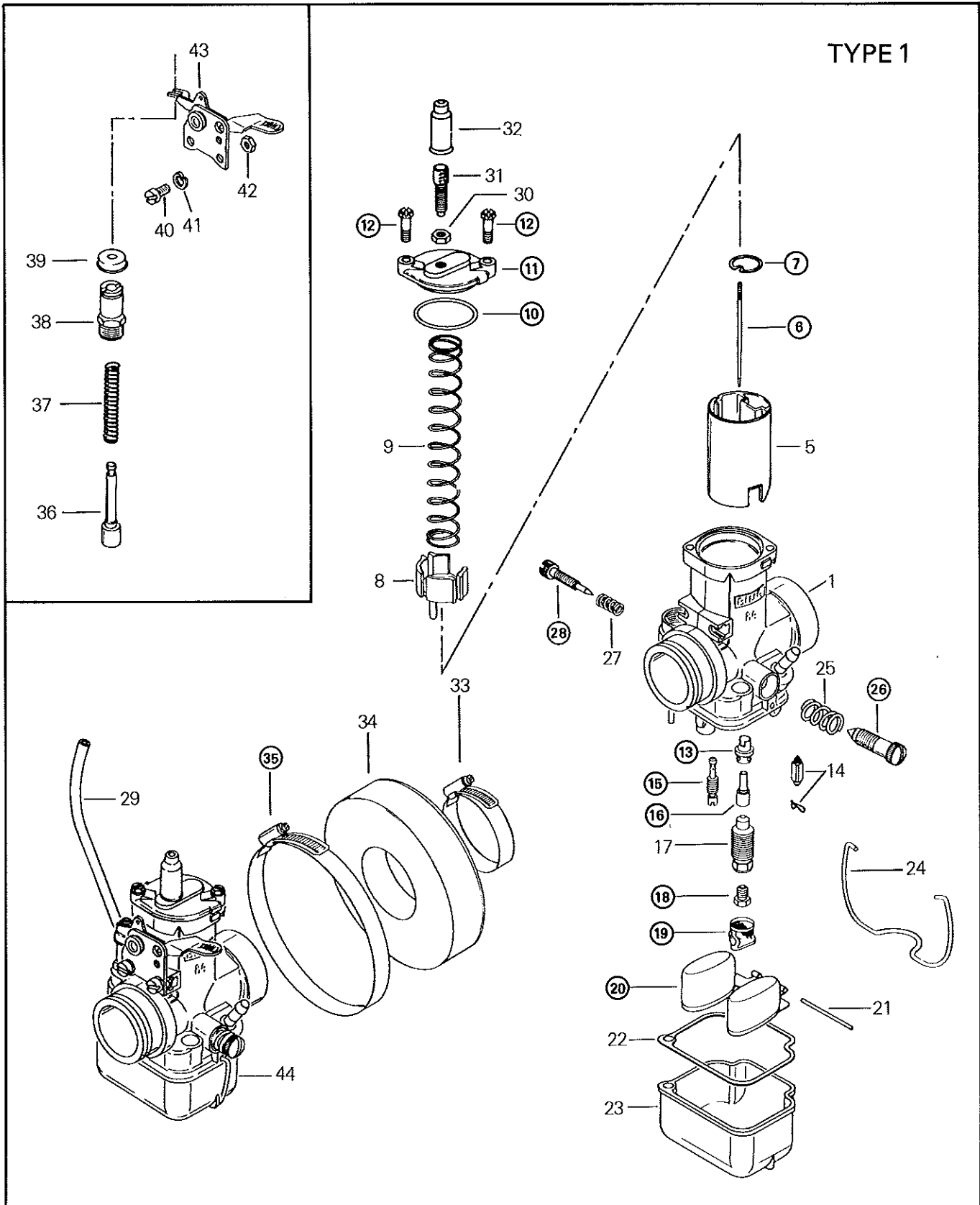
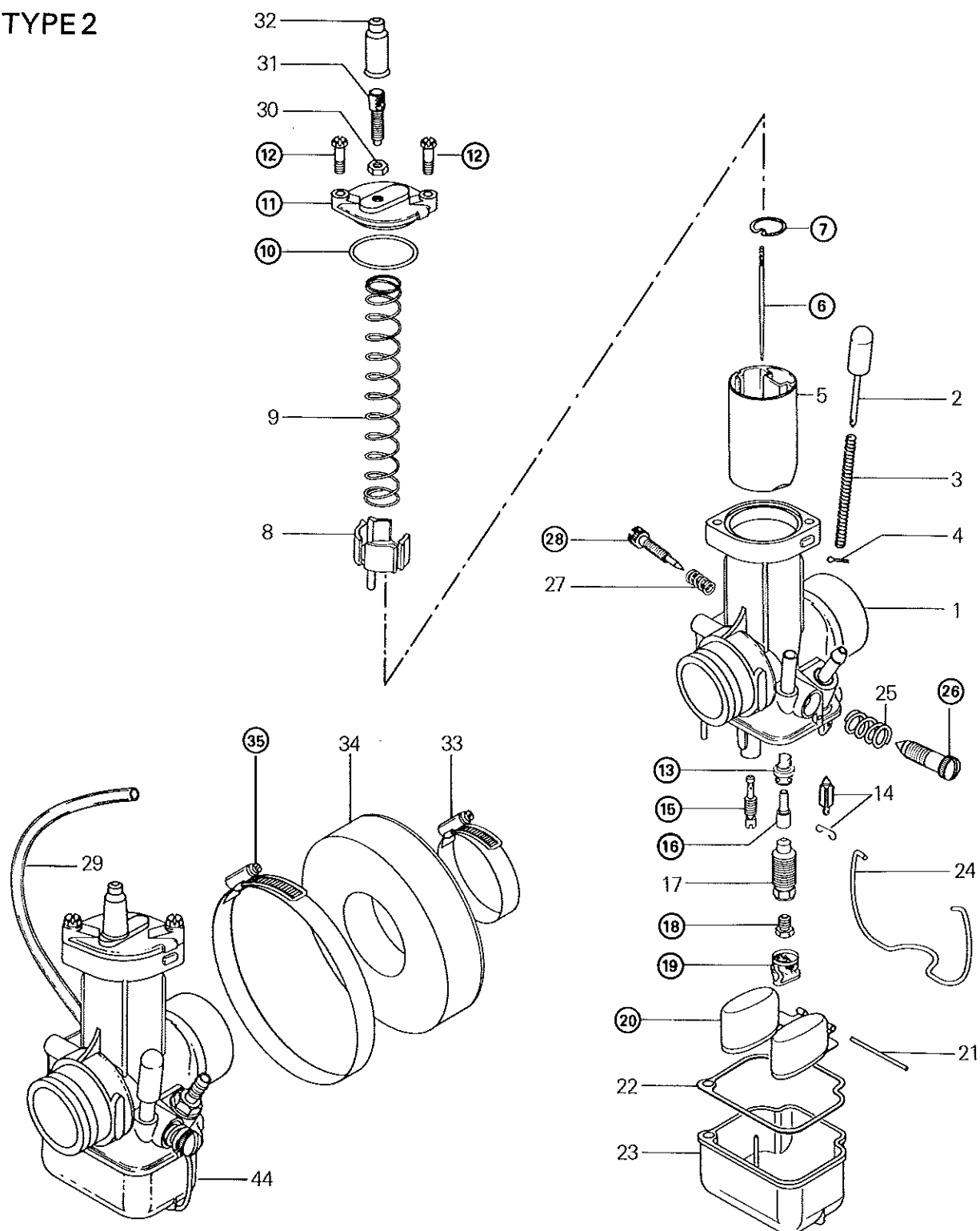


TYPE 1



SECTION 01 ENGINE
SUB-SECTION 03 (CARBURETOR)

TYPE 2



- | | |
|----------------------------|----------------------------------|
| 1. Carburetor body | 23. Float chamber |
| 2. Primer knob | 24. Float chamber spring clip |
| 3. Primer spring | 25. Idle adj. screw spring |
| 4. Primer split pin | 26. Idle adj. screw |
| 5. Throttle slide | 27. Idle air screw spring |
| 6. Needle | 28. Idle air screw |
| 7. Needle clip | 29. Vent tube |
| 8. Plastic spring cup | 30. Hexagon nut M6 x 0.75 |
| 9. Throttle slide spring | 31. Adj. screw M6 x 0.75 |
| 10. "O" ring | 32. Rubber grommet |
| 11. Slide chamber cover | 33. Hose clamp (carburetor) |
| 12. Hexagon screw, M5 x 12 | 34. Carburetor boot |
| 13. Diffuser | 35. Hose clamp (air box) |
| 14. Inlet needle & clip | 36. Starting piston w / gasket |
| 15. Idle jet | 37. Starting piston spring |
| 16. Needle jet | 38. Closure screw |
| 17. Mixing tube | 39. Rubber cap |
| 18. Main jet | 40. Cylinder screw M5 x 10 (2) |
| 19. Screen sleeve | 41. Lockwasher 5 mm (2) |
| 20. Float | 42. Hexagonal nut M5 (2) |
| 21. Float arm pin | 43. Choke lever ass'y |
| 22. Float chamber gasket | 44. Bing double float carburetor |

REMOVAL

Disconnect or perform the following then remove carburetor from engine.

Fuel line (at carburetor).

○ **NOTE:** Make sure the fuel valve is on "O" (off) position.

Completely loosen both carburetor retaining hose clamps. (Slide front clamp forward and rotate carburetor towards clutch side).

Unscrew the 2 screws from carburetor slide chamber cover & pull out throttle slide ass'y.

▼ **CAUTION:** Exercise care when handling throttle slide. Damage incurred may cause throttle slide to stick open in operation.

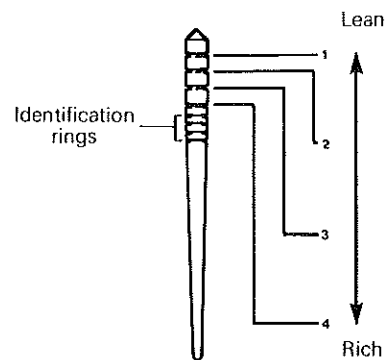
Pry carburetor body towards air box, out of the engine / carburetor adaptor.

Twist carburetor body away from engine inlet port and remove carburetor (complete with boot).

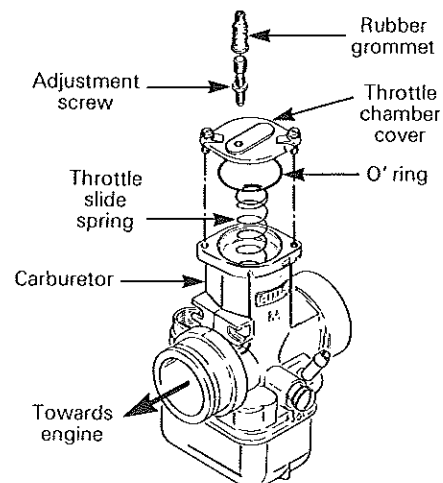
DISASSEMBLY & ASSEMBLY

⑥⑦ At assembly, refer to technical data for correct installation position of needle clip into needle grooves.

○ **NOTE:** Grooves are numbered 1 to 4, starting from the top.



⑩⑪⑫ The slide chamber cover should be installed with the throttle cable adjuster facing towards the engine. Tighten the (2) retaining screws securely.

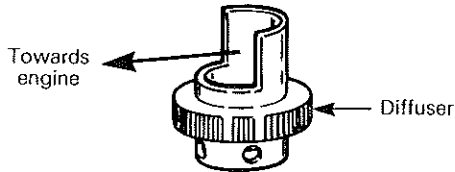


SECTION 01 ENGINE

SUB-SECTION 03 (CARBURETOR)

○ **NOTE:** Apply a light coat of silicone grease on the "O" ring to improve sealing ability.

⑬ The diffuser should be installed with the cut-away facing towards the engine.



⑮⑯⑰ Different size jets (main, idle, needle) are available for various temperatures and altitudes. Refer to the technical data's application charts for jet selection.

▼ ⑱ **CAUTION:** At assembly make sure to install the screen sleeve, otherwise dirt or water clog the carburetor main jet.

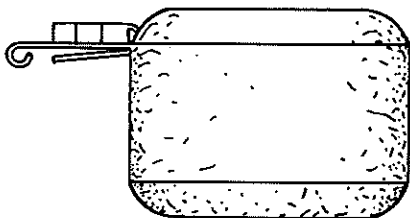
⑳ Correct fuel level in float chamber is vital for engine efficiency. To check for correct level, proceed as follows:

Remove float chamber and gasket from carburetor.

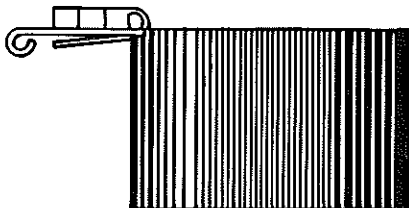
With carburetor on its side with float adjustment tab just touching needle, measure distance between top of float and float chamber body (from the gasket groove bottom).

Adjust float height to:

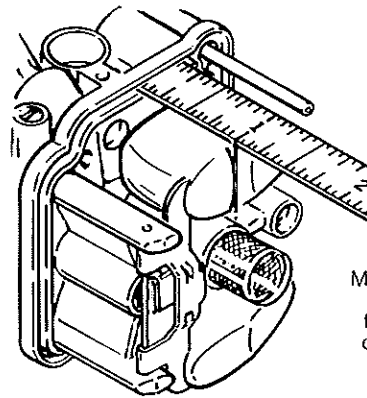
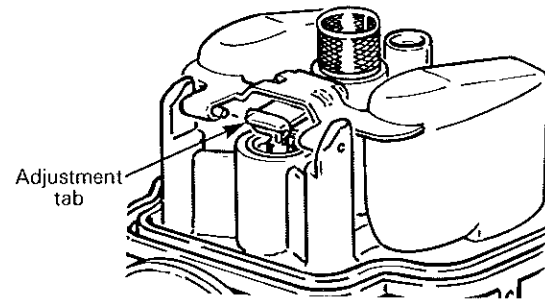
white float type
25 mm (1")



black float type
22.5 mm (.885")



To adjust, carefully bend adjustment tab of float arm until specified height is reached.

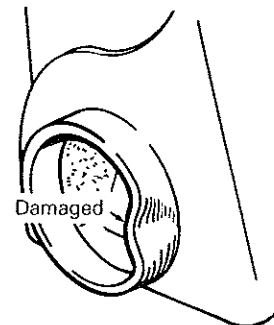


Measure the height
of the float
from the bottom
of gasket groove

○ **NOTE:** If no measuring device is available position the top of the float parallel with the carburetor body (This applies to both float types).

⑳㉔ Apply a light coat of silicone grease (DC-4 or equivalent), on the adjustment screw threads to improve sealing ability.

▼ ㉕ **CAUTION:** Make sure not to overtighten the air box boot hose clamp. Air box flange may distort sufficiently to allow entry of foreign particles.



CLEANING AND INSPECTION

The entire carburetor should be cleaned with a general solvent and dried with compressed air before disassembly.

Carburetor body and jets should be cleaned in a carburetor cleaner following manufacturer's instructions.

◆ **WARNING:** Solvent with a low flash point such as gasoline, naphtha, benzol, etc., should not be used as they are flammable and explosive.

Check inlet needle tip condition. If worn, the inlet needle should be replaced.

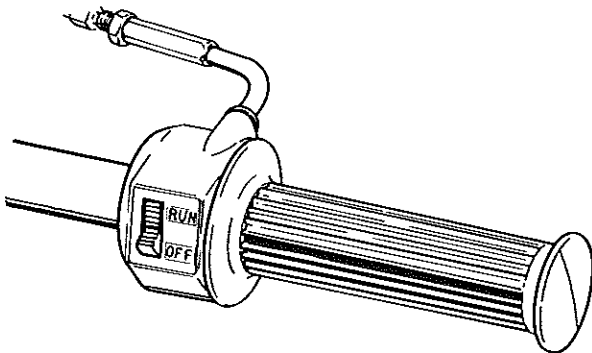
Check throttle slide for wear. Replace if worn or damage.

INSTALLATION & ADJUSTMENT

To install carburetor, inverse removal procedure.

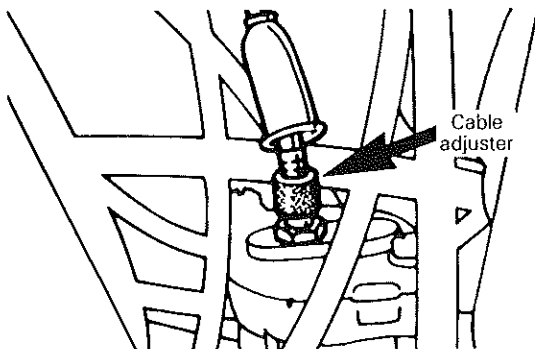
Throttle and injection pump adjustment

½ turn throttle (ZKW)

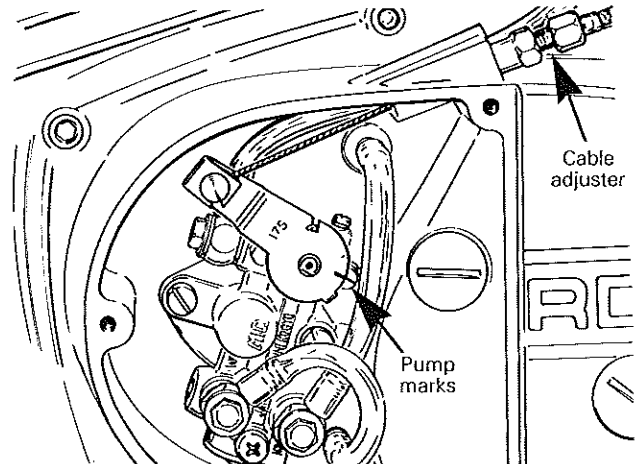


Loosen the throttle cable adjuster (at twist grip) to provide maximum slack.

Using the cable adjuster on the throttle slide chamber cover, set cable slack to 1.6 mm (1/16 ").



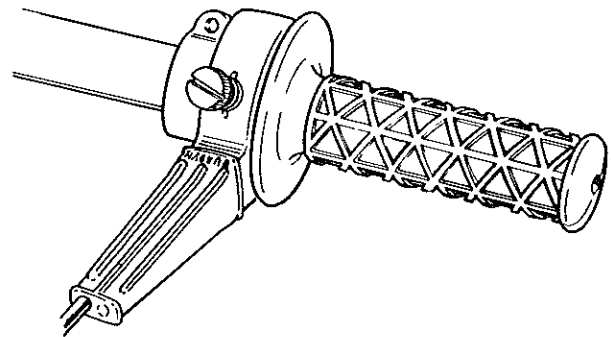
Using injection pump cable adjuster, adjust cable to align pump marks as shown.



Adjust throttle cable (at twist grip) to provide 1.6 mm (1/16 ") slack.

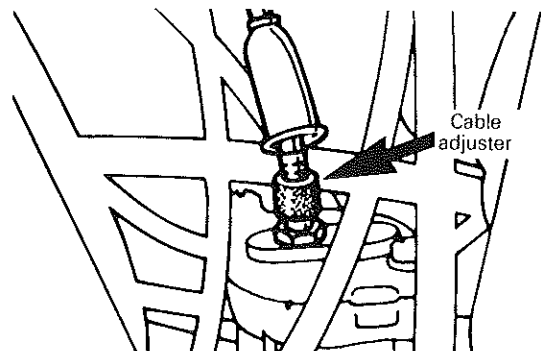
◆ **WARNING:** Before starting engine, carburetor slide must be free to snap back to idle position. Make sure the rubber grip does not rub on the throttle body or the handlebar end.

½ turn throttle (Magura)



Loosen the twist grip throttle cable adjuster (located on the mid-portion of the cable routed underneath the gas tank) to provide maximum slack.

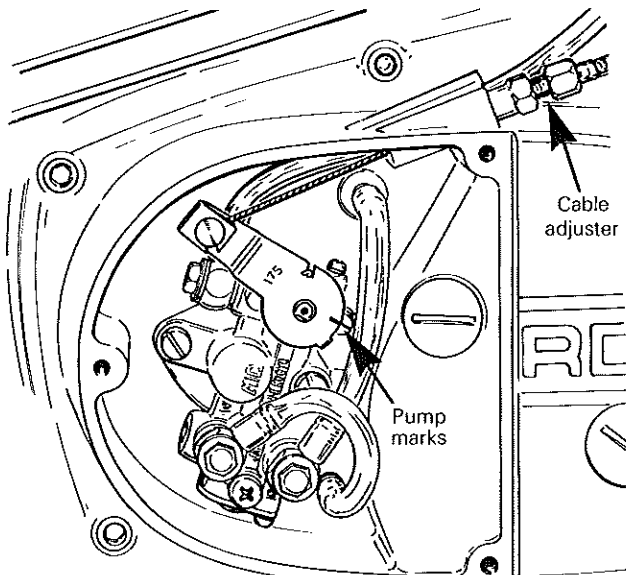
Using the cable adjuster located on the throttle slide chamber cover, set cable slack to 1.6 mm (1/16 ").



SECTION 01 ENGINE

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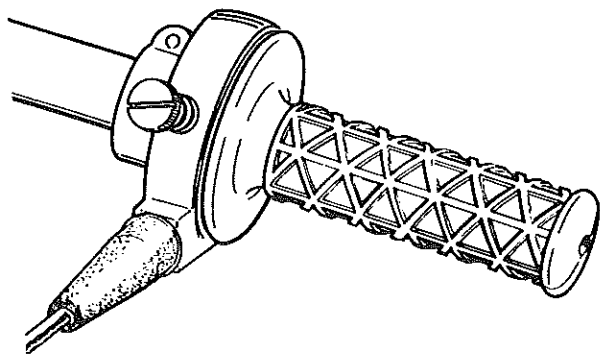
Using pump cable adjuster, adjust cable to align pump marks as shown.



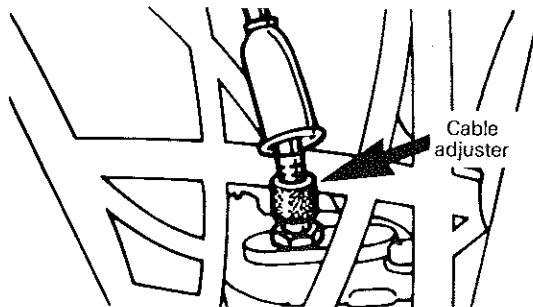
Adjust throttle cable at twist grip (cable adjuster is located on the mid-portion of the cable mounted underneath the gas tank) to provide 1.6 mm ($\frac{1}{16}$ ") slack.

◆ **WARNING:** Before starting engine, carburetor slide must be free to snap back to idle position. Make sure the rubber grip does not rub on the throttle body.

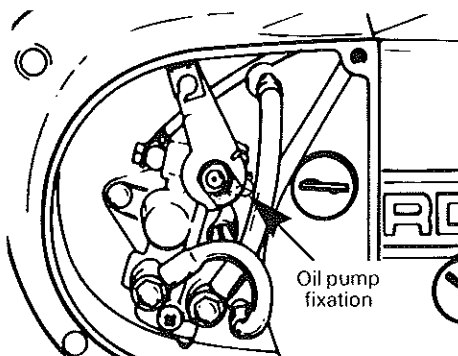
$\frac{1}{4}$ turn throttle (Magura)



Using the cable adjuster located on the throttle slide chamber cover, set cable slack to 1.6 mm ($\frac{1}{16}$ ").



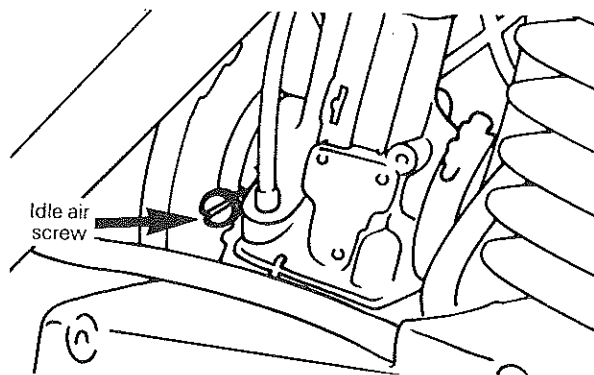
On the MX-3 models, the oil injection pump is preset to deliver a constant amount of oil at any given R.P.M. and does not require any adjustment.



◆ **WARNING:** Before starting engine, carburetor slide must be free to snap back to idle position. Make sure the rubber grip does not rub on the throttle body or the handlebar end.

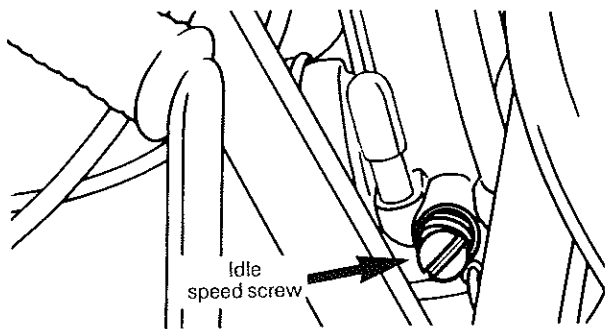
Idle speed and mixture adjustment

With the motorcycle held in a vertical position, gently turn air mixture adjusting screw in until it stops, then back it out to specification. (Refer to technical data section).



Start the engine and allow it to warm.

Adjust idle speed screw in or out for desired idle speed (approximately 1,000 R.P.M.)



○ **NOTE:** The air mixture screw can be turned in or out (within $\frac{1}{4}$ turn of basic setting) to achieve smoothest idle possible. Re-adjust idle speed if necessary.

AIR FILTER SERVICING

Remove the seat. Clean the area around the filter.

Remove the air filter. Do not allow dirt or dust to fall into the air box opening.

Separate the foam from the filter screen.

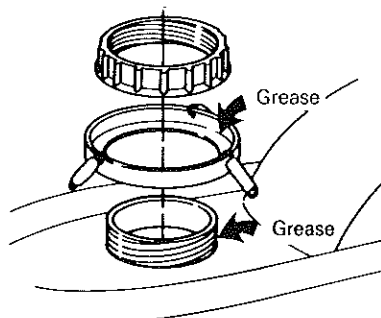
Thoroughly wash the foam in solvent or with soap and water and allow it to air dry.

▼ **CAUTION:** Do not dry filter foam with a high pressure air flow as it will loose its efficiency.

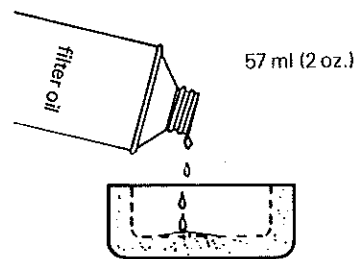
Remove the plastic nut retaining the metal filter pan. Remove the pan then thoroughly clean the air filter splash pan.

Inspect the interior of the air box. If dirt has entered, remedy the cause before re-assembly.

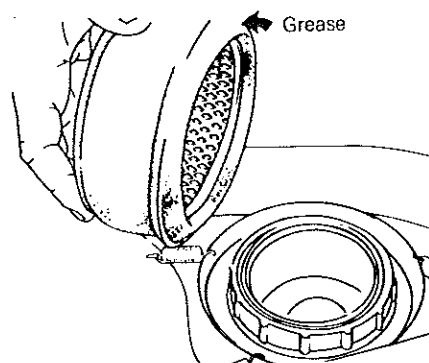
Grease the top of the splash pan around the air box opening then position the metal filter pan. Coat the metal filter pan with grease. Coat the threads of the plastic retaining nut with grease and screw it **tightly** into position.



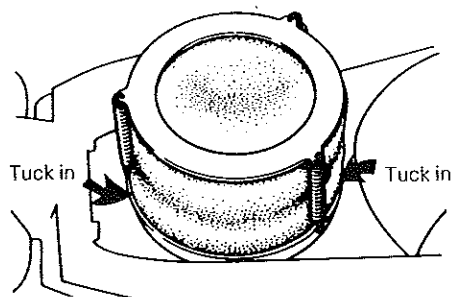
Pour 57 ml (2 fl. oz.) of filter compound onto the filter element and work it well into the foam until it is completely saturated.



Fit the screen into the foam element, generously grease the bottom edge of the foam and install the filter.



Be sure element edge is tucked into metal pan.



◆ **WARNING:** A dry or dirty filter will cause extreme piston and cylinder damage that may not be covered by warranty.

APPLICATION CHART

CARBURETOR TYPE	APPLICATION
TYPE 1	T'NT 175 (7851)
	T'NT 250 (7861)
	QUALIFIER 125 (7845)
	QUALIFIER 175 (7855)
	QUALIFIER 250 (7865)
TYPE 2	MX-3 175 (7854)
	MX-3 250 (7864)